



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 09/594,170  | 06/15/2000  | Helmut Rudigier      | 622HE/48982               | 8885             |
| 7590 04/05/2004<br>CROWELL & MORING, LLP<br>P.O. BOX 14300<br>WASHINGTON, DC 20044-4300 |             |                      | EXAMINER<br>ROJAS, OMAR R |                  |
|   |             |                      | ART UNIT<br>2874          | PAPER NUMBER     |
| DATE MAILED: 04/05/2004   |             |                      |                           |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/594,170

Applicant(s)

RUDIGIER, HELMUT

Examiner

Omar Rojas

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-9, 12-22, 25-30, and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9, 12, 14-22, 25-30 and 32-35 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 0404.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. With regards to the amendment filed on December 15, 2003, all the requested changes to the claims have been entered.

### ***Drawings***

2. The drawings were received on July 21, 2003. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Claim 3 is vague because it is not clear as written whether the reflective layer of the glass body is the same as the reflective layer which equips the support, or whether they are distinct structures.

6. Claims 14 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: that the support is inserted in a slot of the switch body at a level of medium deepness. The use of the slot is essential to define the depth relationship of the support to the switch body.

Art Unit: 2874

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 2-3, 5-9, 15-17, 20-22, 25, 28-30, 32, and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,275,626 to Laor.**

Regarding claim 3, Laor teaches a switch (e.g., see Fig. 5) having at least one mirror surface (112, 114) comprising a reflective layer, a support (28) equipped with said reflective layer, wherein the support (28) and the mirror surface(s) (112,114) are arranged on a swiveling switch body (26), and wherein the support (28) inherently comprises a glass body provided on top and bottom sides with the mirror surfaces. See also Laor at column 5, lines 23-64.

Regarding claims 2, 5-9, 20, and 32, Laor at column 5, lines 32-50, appears to disclose or suggest all the limitations of claims 2, 5-9, 20, and 32.

Art Unit: 2874

Regarding claim 15, the previous remarks concerning claim 3 are incorporate herein. It is further noted that support (28) of Laor appears to project from the switch body (26) in a substantially lug-like manner.

Regarding claim 16, the examiner incorporates the previous remarks and further notes that the applicant(s) is claiming the product including the process of making the optical switch (i.e., gluing the support to the switch body). Therefore, claim 16 is of "product-by-process" nature. The courts have been holding for quite some time that the determination of the patentability of product-by-process claim is based on the product itself rather than on the process by which the product is made. *In re Thorpe*, 77 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). Patentability of claim to a product does not rest merely on a difference in the method by which that product is made. Rather, it is the product itself which must be new and unobvious. Applicant has chosen to claim the invention in the product form. Thus, a prior art product which possesses the claimed product characteristics can anticipate or render obvious the claimed subject matter regardless of the manner in which it is fabricated. A rejection based on 35 U.S.C. section 102 or alternatively on 35 U.S.C. section 103 of the status is eminently appropriate and acceptable. *In re Brown and Saffer*, 173 USPQ 685 and 688; *In re Pilkington*, 162 USPQ 147. Therefore, no patentable weight is given to the limitations of claim 16.

Art Unit: 2874

Regarding claims 17, 21-22, and 34, note the previous remarks concerning claims 2, 5-9, 20, and 32.

Regarding claims 25, 28-30, and 35, Laor also appears to substantially disclose the claimed method. See the previous remarks.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**10. Claims 4, 12, 18-19, 26, and 27 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Laor.**

Regarding claims 4, 18-19, and 26-27, the previous remarks are incorporated herein. Therefore, Laor further differs from claims 4, 18-19, and 26-27, in that the thickness of the glass support (28) is not expressly disclosed as being within the recited range(s) of claims 4, 18-19, or 26-27. However, finding an optimum thickness for the glass support (28) of Laor would be considered an obvious design choice, perhaps involving some routine experimentation. Thus, if the thickness of the reflector (28) in Laor is not inherently within the ranges specified by claims 4, 18-19, and 26-27, it would be obvious for one of ordinary skill in the art to determine an optimum size/thickness for the reflector which falls within the claimed ranges through routine experimentation.

Art Unit: 2874

Therefore, it would have been obvious to one of ordinary skill at the time of the claimed invention to obtain the invention specified by claims 4, 18-19, and 26-27.

Regarding claim 12, the previous remarks are incorporated herein. Laor is silent as to the material of the switch body (26). However, if the material of the switch body (26) was not inherently a material that can be cast or injection molded, it would be obviously expedient to use such a material in Laor for purposes of mass production. This is because it is well-known that many metals (i.e., aluminum, iron, etc.) can be cast and many types of plastics can be injection molded. Casting and injection molding are also well-known to be desirable processes in the mass production of manufactured devices. Thus, materials which can be adapted for use in such processes would be desirable to one of ordinary skill in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to obtain the invention specified by claim 12.

***Allowable Subject Matter***

11. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claim 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

13. Claim 33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Art Unit: 2874

14. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 13, it does not appear to be suggested by or obvious in view of Laor to arrange his support (28) on a cuboid-shaped switch body in a surface-flush manner in a recess. Regarding claims 14 and 33, it does not appear to be suggested by or obvious in view of Laor to insert his support (28) at a cuboid-shaped switch body at a level of medium deepness within a slot as suggested by claims 14 and 33.

**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357 and whose e-mail address is *omar.rojas@uspto.gov*. The examiner can normally be reached on Monday-Friday (7:00AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hemang Sanghavi, can be reached on (571) 272-2358. The central facsimile number for regular and After Final communications is (703) 872-9306. The examiner's RightFAX number is (571) 273-2357.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Omar Rojas  
Patent Examiner  
Art Unit 2874

or  
April 1, 2004



HEMANG SANGHAVI  
PRIMARY EXAMINER